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09/804,735	03/13/2001	Kannan Srinivasan	696.002	2033

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FERENCE & ASSOCIATES
409 BROAD STREET
PITTSBURGH, PA 15143

EXAMINER

JANVIER, JEAN D

ART UNIT	PAPER NUMBER
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3622

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/16/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/804,735

Applicant(s)

SRINIVASAN ET AL.

Examiner

Jean Janvier

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/17/06 has been entered and a Non-Final Action follows.

Response To Applicant's Arguments

Applicant's arguments with respect to the claimed invention have been considered but are moot in view of the new ground(s) of rejection. Further, the Applicant's arguments are based on the amended claims and are fully addressed in the Office Action. See also the Examiner's remarks as herein recorded.

First of all, concerning independent claims 1 and 20, in the step of "receiving configuration data from the Internet merchant, wherein such configuration data assists in communication with the Internet merchant", the underlined portion does not further limit or clarify the claim limitation, which is a broad claim language and will herein be interpreted as such. Second of all, in the step of "running multiple experiments according to the configuration data on an on-going basis on randomly chosen visitors to the Internet web site", the "multiple experiments" are interpreted as --multiple promotions-- or --multiple advertisements--. Third of all, and more importantly, the "running multiple experiments according to the configuration data on an on-going basis on randomly chosen visitors to the Internet web site" claim limitation

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appears to be confusing and ambiguous. Here, since the presentation of the multiple advertisements is performed in accordance with the merchant's configuration data, then the presentation is somewhat a targeted presentation and hence, the visitors or recipients of the advertisements are not randomly selected. Indeed, if the presentation is performed based on the merchant's configuration data, then the recipients of the advertisements are being targeted and thus, it appears that there should be a match between the recipients'/visitors' characteristics and the merchant's configuration data in order for the advertisements to be presented. Paragraphs [0028] and [0029] also reflect the latter claim limitation. Additionally, the Examiner does not read into the claimed invention the points or claim language clarifications presented by the Applicant during the interview.

Moreover, Robinson discloses in general, contrary to the Applicant's findings, a system for displaying a targeted (optimal) advertisement from an advertiser to at least one second user (subject) if a plurality of first users from the subject's community or if an unusually high proportion of members from the subject's community (high proportion of the first users), having similar profile as the subject or second user, have indeed clicked on the same advertisement. Here, the advertiser has provided one or more advertisements along with display criteria **(merchant's configuration data, which assist in communication with the Internet merchant or help deliver the merchant's advertisements to the Internet visitors)**, such as demographics, that the users must have before the advertisements can be presented to them. The system is configured to at least display one targeted advertisement to a plurality of first users (randomly selected) matching the merchant's received configuration data or advertiser's display criteria. Subsequent to displaying a plurality of advertisements (multiple experiments) to a

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plurality of different groups of first users with different profiles matching the advertisements display criteria during a training period or test period (randomly sampling visitors in accordance with the merchant's configuration data), training or test data are collected and used to determine which advertisement(s) among the plurality of displayed advertisements receives an unusually high proportion of clicks from a plurality of first users (determining an optimal advertisement from the multiple experiments or advertisements). And the advertisement receiving the highest number of clicks from a first plurality of users having a specific profile is qualified as the **optimal advertisement**. Thereafter, the **optimal advertisement is displayed to at least a second user having a similar profile as the first plurality of users viewing the (optimal) advertisement since people who have shown a tendency for similar likes and dislikes in the past will show a tendency for such similarities in the future (Robinson's invention).**

Robinson further discloses, in one embodiment, that a new ad is displayed randomly or on a fixed schedule to a certain number of users or visitors (randomly sampling visitors). During this "training period" for the new ad, **a certain percentage of the members of the subject's community will click on the new ad**. If this is an unusually high proportion (a percentage better or a threshold number), then there is a relatively high likelihood that the ad will be of relatively high interest to the subject or to one or more similar visitors (the ad will generate more click-throughs from one or more other visitors with similar profile). Here, statistical techniques are used to determine a probability, associated with a fixed confidence level, with which one can assume that a randomly-chosen member of the subject's community (or one or more other users) will tend to click on the ad; this probability is used as the measure of similarity. Once again, a new ad is displayed to certain visitors of the community of surfers (sampling visitors) and the

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system determines whether a high or low proportion of visitors have indeed read the ad and have chosen to view further information associated with the ad (weighing process or click-through). If a high proportion has chosen to view further information related to this ad, then the ad will be presented to similar users having the same profile as the sampled visitors who had originally interacted with the ad (Col. 3: 3-28; col. 3: 61 to col. 4: 14; See claims 1-3, 8 and 17 of the current reference).

In a further embodiment, a new ad(s) is randomly displayed to a certain number of users (random visitors) during a first period of time or training period. During this "training period" for the new ad, a certain percentage of the members of the subject's community will click on it. If this is an unusually high proportion, then there is a relatively high likelihood that the ad will be of relatively high interest to the subject (determining an optimal advertisement in accordance with the merchant's or advertiser's configuration data). Here, statistical techniques are used to determine a probability, associated with a fixed confidence level, with which we can assume that **a randomly-chosen member of the subject's community (will tend to click on the ad; this probability is used as the measure of similarity.** (Randomly chosen visitors are exposed to one or more new ads before an optimal advertisement or the ad with the highest click-through percentage is determined. See col. 3: 3-15).

For each ad from a plurality of new ads submitted by an advertiser, there will have to be a period when ACF (Automated Collaborative Filtering) techniques are not the sole determinant of which (optimal) ad is displayed. **Instead, such ads will be displayed either according to a fixed schedule or randomly.** Moreover, a particular embodiment of the present system could also choose to continually have a probability that the ad(s) shown to a user(s) at

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any given time might be randomly chosen rather than selected by ACF techniques (here, the ads or experiments are randomly selected and displayed to users or visitors (at random) when they visit particular web sites predetermined by an advertiser or merchant (or based on the merchant's configuration data)). There is a tradeoff when the ads are being randomly displayed or presented to the users (chosen at random). Indeed, the more ads are randomly presented, a) the more data the system will be able to collect for the ACF engine, thereby increasing the accuracy of the engine; and b) the more frequently users will be exposed to random ads that are not relevant to their interests. Here, the ACF engine, using the data compiled from the randomly displayed ads, will be able to determine one or more ads (one or more optimal ads) having received an unusually high proportion of click-throughs by the users (chosen at random), wherein the displayed ads are not based on the users' interests, but rather on the display web sites pre-selected by an advertiser or merchant (or based on the merchant's configuration data) (Col. 19: 6-17; col. 5: 10 to col. 6: 42; col. 19: 18-33).

Therefore, the Applicant's request for allowance or withdrawal of the last Office Action has been fully considered and respectfully denied in view of the foregoing response since the Applicant's arguments as herein presented are not plausible.

DETAILED ACTION

Specification

The title of the invention should be brief, descriptive and technically accurate. See 37 CFR 1.72.

Status of the claims

Claims 1-20 are currently pending in the Instant Application.

General Comments

First of all, concerning independent claims 1 and 20, in the step of “receiving configuration data from the Internet merchant, wherein such configuration data assists in communication with the Internet merchant”, the underlined portion does not further limit or clarify the claim limitation, which is a broad claim language and will herein be interpreted as such. Second of all, in the step of “running multiple experiments according to the configuration data on an on-going basis on randomly chosen visitors to the Internet web site”, the “multiple experiments” are interpreted as --multiple promotions-- or --multiple advertisements--. Third of all, and more importantly, the “running multiple experiments according to the configuration data on an on-going basis on randomly chosen visitors to the Internet web site” claim limitation appears to be confusing and ambiguous. Here, since the presentation of the multiple advertisements is performed in accordance with the merchant’s configuration data, then the presentation is somewhat a targeted presentation and hence, the visitors or recipients of the advertisements are not randomly selected. Indeed, if the presentation is performed based on the merchant’s configuration data, then the recipients of the advertisements are being targeted and thus, it appears that there should be a match between the recipients’/visitors’ characteristics and the merchant’s configuration data in order for the advertisements to be presented. Paragraphs [0028] and [0029] also reflect the latter claim limitation. Additionally, the Examiner does not

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read into the claimed invention the points or claim language clarifications presented by the Applicant during the interview. To this end, it appears that the claim amendment will not help overcome the prior art.

Claim Objections

Claims 1 and 20 are objected to because of the following informalities:

Regarding claims 1 and 20, “wherein such configuration data assists in communication with the Internet merchant” should apparently be -- wherein such configuration data assist in communication with the Internet merchant--. Furthermore, it is unclear what the metes and bounds of the above claim language are or what specifically the Applicant is trying to refer here.

Still concerning claims 1 and 20, “running multiple experiments according to the configuration data on an on-going basis on randomly chosen visitors to the Internet web site” should apparently be --running multiple experiments according to the configuration data on an on-going basis on randomly chosen visitors to an Internet web site--.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international

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application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-20 are rejected under 35 USC 102(e) as being anticipated by Robinson, US Patent 5, 918, 014.

As per claims 1-20, Robinson discloses a system based on the fact that people who have shown a tendency for similar likes and dislikes in the past will show a tendency for such similarities in the future. Those people, continues Robinson, who strongly display such similarities with respect to a particular person ("the subject") are referred to as that person's "community." If the members of a subject's community tend to click on a particular Web ad, then it is likely that the subject will also tend to click on that ad. Robinson further teaches a system that combines techniques for determining the subject's community (for determining which group the subject or user belongs to based on some criteria), and in the end determining which ads (determining an optimal ad that will generate a high click-through rate from users having similar profile as the community or sampled group whose interaction with a web site or the system has been recorded or logged and hence maximizing profits) to show to the user based on characteristics of the subject's community (sampled group or visitors). The information used to determine whether a given individual should be in the subject's community is gleaned from the individual's activities in the interactive medium. Means are provided to track and record a consumer's activities so all the information he generates can be tied together in a database, e.g. by means of "cookies;" or by software running on the consumer's computer, such as an in-line plug-in working in conjunction with the Web browser, or the Web browser itself. The individuals with the greatest calculated similarity become the subject's community (e.g. clusters are formed

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of groups of very similar consumers are formed). Ads are presented to the subject based on his community, optionally selected based on demographics associated with the community. In short, a plurality of targeted visitors' activities, including ads viewed, to a web site are monitored and based upon these visitors' reactions to one or more viewed ads, the one or more ads are then being recommended or displayed to one or more users (being in the same group or cluster as those sampled visitors) having similar profile (configuration data as specified by an advertiser or merchant), such as demographics, as these visitors (See abstract).

Moreover, in the interactive mode or medium on the Internet, the monitoring may comprise previously visited web sites by the targeted visitors, frequency of such visits, items purchased at online stores including their prices (purchase history), entertainment recommendation ratings provided by the visitors, ads read or clicked on by the visitors and the visitors' disinterest in an ad (**Col. 2: 32-48**).

Robinson further discloses, in one embodiment, that a new ad is displayed randomly or on a fixed schedule to a certain number of users or visitors (sampling visitors). During this "training period" for the new ad, **a certain percentage of the members of the subject's community will click on the new ad**. If this is an unusually high proportion (a percentage better or a threshold number), then there is a relatively high likelihood that the ad will be of relatively high interest to the subject or to one or more similar visitors (the ad will generate more click-throughs from one or more other visitors with similar profile). Here, statistical techniques are used to determine a probability, associated with a fixed confidence level, with which one can assume that a randomly-chosen member of the subject's community (or one or more other users) will tend to click on the ad; this probability is used as the measure of similarity. Once again, a

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new ad is displayed to certain visitors of the community of surfers (sampling visitors) and the system determines whether a high or low proportion of visitors have indeed read the ad and have chosen to view further information associated with the ad (weighing process or click-through). If a high proportion has chosen to view further information related to this ad, then the ad will be presented to similar users having the same profile as the sampled visitors who had originally interacted with the ad (Col. 3: 3-28; col. 3: 61 to col. 4: 14; See claims 1-3, 8 and 17 of the current reference).

Additionally, it is understood that once a user's or subject's community or associated group is known, then targeted ads scheduled to be displayed to the user or subject are determined based on a correlation between the group's profile and the user's profile (according to the advertiser's or merchant's specifications or criteria or received configuration data).

Subsequently, a web site, where the ads will be presented, related to these targeted ads is updated accordingly to reflect the generation of these targeted ads such that the ads can be displayed to the user or subject in a future visit at the web site (associated with at least one generated ad) contingent upon the advertiser's specifications.

In general, Robinson discloses a stem for displaying a targeted (optimal) advertisement from an advertiser to at least one second user (subject) if a plurality of first users from the subject's community or if an unusually high proportion of members from the subject's community (high proportion of the first users), having similar profile as the subject or second user, have indeed clicked on the same advertisement. Here, the advertiser has provided one or more advertisements along with display criteria (**merchant's configuration data, which assist in communication with the Internet merchant or help deliver the merchant's**

advertisements to the Internet visitors), such as demographics, that the users must have before the advertisements can be presented to them. The system is configured to at least display one targeted advertisement to a plurality of first users (randomly selected) matching the merchant's received configuration data or advertiser's display criteria. Subsequent to displaying a plurality of advertisements (multiple experiments) to a plurality of different groups of first users with different profiles matching the advertisements display criteria during a training period or test period (randomly sampling visitors in accordance with the merchant's configuration data), training or test data are collected and used to determine which advertisement(s) among the plurality of displayed advertisements receives an unusually high proportion of clicks from a plurality of first users (determining an optimal advertisement from the multiple experiments or advertisements). And the advertisement receiving the highest number of clicks from a first plurality of users having a specific profile is qualified as the **optimal advertisement**. Thereafter, the **optimal advertisement is displayed to at least a second user having a similar profile as the first plurality of users viewing the (optimal) advertisement** since people who have shown a tendency for similar likes and dislikes in the past will show a tendency for such similarities in the future

See fig. 1; Col. 1: 27 to col. 3: 46; col. 7: 47 to col. 8: 20; see claims 1-25 of the present reference.

In a further embodiment, a new ad(s) is randomly displayed to a certain number of users (random visitors) during a first period of time or training period. During this "training period" for the new ad, a certain percentage of the members of the subject's community will click on it. If this is an unusually high proportion, then there is a relatively high likelihood that the ad will be

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of relatively high interest to the subject (determining an optimal advertisement in accordance with the merchant's or advertiser's configuration data). Here, statistical techniques are used to determine a probability, associated with a fixed confidence level, with which we can assume that **a randomly-chosen member of the subject's community (will tend to click on the ad; this probability is used as the measure of similarity.** (Randomly chosen visitors are exposed to one or more new ads before an optimal advertisement or the ad with the highest click-through percentage is determined. See col. 3: 3-15).

For each ad from a plurality of new ads submitted by an advertiser, there will have to be a period when ACF (Automated Collaborative Filtering) techniques are not the sole determinant of which (optimal) ad is displayed. **Instead, such ads will be displayed either according to a fixed schedule or randomly.** Moreover, a particular embodiment of the present system could also choose to continually have a probability that the ad(s) shown to a user(s) at any given time might **be randomly chosen rather than selected by ACF techniques (here, the ads or experiments are randomly selected and displayed to users or visitors (at random) when they visit particular web sites predetermined by an advertiser or merchant (or based on the merchant's configuration data)).** There is a tradeoff when the ads are being randomly displayed or presented to the users (chosen at random). Indeed, the more ads are randomly presented, a) the more data the system will be able to collect for the ACF engine, thereby increasing the accuracy of the engine; and b) the more frequently users will be exposed to random ads that are not relevant to their interests. Here, the ACF engine, using the data compiled from the randomly displayed ads, will be able to determine one or more ads (one or more optimal ads) having received an unusually high proportion of click-

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throughs by the users (chosen at random), wherein the displayed ads are not based on the users' interests, but rather on the display web sites pre-selected by an advertiser or merchant (or based on the merchant's configuration data) (Col. 19: 6-17; col. 5: 10 to col. 6: 42; col. 19: 18-33).

Claims 1-20 are rejected under 35 USC 102(e) as being anticipated by Lipsky, US Patent 7,031,932.

As per claims 1-20, Lipsky discloses a facility for adjusting the execution of an advertising campaign in which advertising messages (experiments) are presented to users using a plurality of advertising alternatives. During a first time period, the facility presents advertising messages using each of the advertising alternatives in accordance with an initial allocation for each of the advertising alternatives. Also during the first time period, the facility tracks the performance of the advertising campaign with respect to each of the advertising alternatives. Based upon the tracking during the first time period, the facility attributes a performance score to each of the advertising alternatives for the first time period. The facility compares these scores, and, based upon the comparison, adjusts the allocations for the advertising alternatives so as to increase one or more allocations for advertising alternatives, which compare favorably in the comparison, and so as to reduce one or more allocations for advertising alternatives comparing unfavorably in the comparison. The facility then, during a second time period, presents advertising messages using each of the advertising alternatives in accordance with the adjusted allocation for each of the advertising alternatives (See abstract).

In an exemplary, reallocating between cost packages may involve negotiating with the publisher or other seller of a higher-performing cost package to increase the volume of the higher-performing cost package, as well as negotiating with the publisher or other seller of a lower-performing cost package to cancel or decrease the volume of the lower-performing cost package. Reallocating between the placements of a cost package may involve negotiating with the publisher or other seller of the cost package to increase the volume of the higher-performing allocations of the cost package and decrease the volume of the lower-performing allocations of the cost package. Reallocating between advertising messages presented in a placement may involve increasing the probability that higher performing advertising messages are served in response to an advertising message request for the placement and decreasing that probability for lower-performing advertising messages. After adjusting these allocations in accordance with the effectiveness scores, the facility continues the campaign using these new allocations, again maintaining performance statistics in order to later perform further reallocations (Col. 2: 62 to col. 3: 15).

In summary, Lipsky discloses a system that displays ads (experiments) to users and monitors the ads performance to thereby determine one or more higher-performing (optimal) ads that will be presented to users in the future.

Please consider the entire reference.

Conclusion

Although the following references were not used in the Office Action, they were highly considered by the Examiner. Applicants are further directed to consult these references.

USP 6,286,005B1 to Cannon discloses a computer-based decision support system that includes three main components: a database mining engine (DME); an advertising optimization mechanism; and a customized user interface that provides access to the various features of the invention. The user interface, in conjunction with the DME, provides a unique and innovative way to store, retrieve and manipulate data from existing databases containing media-related audience access data, which describe the access habits and preferences of the media audience. By using a database with a simplified storage and retrieval protocol, the data contained therein can be effectively manipulated in real time. This means that previously complex and lengthy information retrieval and analysis activities can be accomplished in very short periods of time (typically seconds instead of minutes or even hours). Further, by utilizing the advertising optimization mechanism of the present invention, businesses, networks, and advertising agencies can interactively create, score, rank and compare various proposed or actual advertising strategies in a simple and efficient manner. This allows the decision-makers to more effectively tailor their marketing efforts and successfully reach the desired target market while conserving scarce advertising capital. Finally, the user interface for the system provides access to both the DME and the optimization mechanism in a simple and straightforward manner, significantly reducing training time (See abstract).

US Patent 6,567,786 to Bibelnicks discloses a method, and system for increasing the efficiency of customer contact strategies is disclosed. Customers are analyzed based upon historical criteria; a promotional plan (a group of promotion events implemented or to be implemented over a particular time period) is analyzed to determine the effect of each promotion event on the other promotion events in the promotional plan; and, based on this analysis, the optimal promotion stream (a specific subset of the promotional plan to be sent to customers or a group of similar customers) is determined so as to maximize the ROI of the promotional plan as a whole (See abstract).

US Patent 6, 338, 066 to Martin discloses a log of previous web-surfer behavior listing the order in which each surfer downloaded specific items at the web site, and given a meaningful classification of those same items, future surfer behavior is predicted by the present invention. The algorithm utilizes a quantitative model relating items downloaded prior to some specified event to items downloaded after that same event. When the model is applied to a new surfer's session prior to an analogous event, the present invention predicts the likely behavior of the surfer subsequent to that event. The predicted behavior is then further analyzed to derive a quantitative value for the utility of the expected behavior. By randomly selecting sample sessions from a web log, multiple models of surfer behavior can be generated. The multiple models can then be applied to a new surfer's session to produce a predicted behavior/utility distribution and thus a confidence interval for the predicted behavior/utility (See abstract).

US Patent 6, 356,879 to Aggarwal discloses a system for deriving product characterizations for products offered at an e-commerce site based on the text descriptions of the

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products provided at the site. A customer characterization is generated for any customer browsing the e-commerce site. The characterizations include an aggregation of derived product characterizations associated with products bought and/or browsed by that customer. A peer group is formed by clustering customers having similar customer characterizations. Recommendations are then made to a customer based on the processed characterization and peer group data (See abstract).

US Patent 6, 430, 539 to Lazarus discloses a predictive modeling of consumer financial behavior is provided by application of consumer transaction data to predictive models associated with merchant segments. Merchant segments are derived from consumer transaction data based on co-occurrences of merchants in sequences of transactions. Merchant vectors representing specific merchants are clustered to form merchant segments in a vector space as a function of the degree to which merchants co-occur more or less frequently than expected. Each merchant segment is trained using consumer transaction data in selected past time periods to predict spending in subsequent time periods for a consumer based on previous spending by the consumer. Consumer profiles describe summary statistics of consumer spending in and across merchant segments. Analysis of consumers associated with a segment identifies selected consumers according to predicted spending in the segment or other criteria, and the targeting of promotional offers specific to the segment and its merchants (See abstract).

Any inquiry concerning this communication from the Examiner should be directed to Jean D. Janvier, whose telephone number is (703) 308-6287). The aforementioned can normally be reached Monday-Thursday from 10:00AM to 6:00 PM EST. If attempts to reach the Examiner

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by telephone are unsuccessful, the Examiner's Supervisor, Mr. Eric W. Stamber, can be reached at (703) 305- 8469.

For information on the status of your case, please call the help desk at (703) 308-1113

Further, the following fax numbers can be used, if need be, by the Applicant(s):

After Final- 703-872-9327

Before Final -703-872-9326

Non-Official Draft- 703-746-7240

Customer Service- 703-872-9325

JDJ

01/06/07

JEAN D. JANVIER
PRIMARY EXAMINER

A handwritten signature in cursive script, appearing to read "Jean D. Janvier", written over the printed name and title.